

NEUROREHABILITATION OF CHILDREN WITH SPINAL MUSCULAR ATROPHY TYPES II, III:  
INNOVATIVE STRATEGIES AND PRECISION CAPABILITIES

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**Background.** To improve the effectiveness of the curation of patients with spinal muscular atrophy (SMA), a comprehensive analysis of the levels of damage to motor units involved, including myopathy and neuropathy, is relevant.

**Aims:** to study the effectiveness of the precision therapy strategy.

**Material and methods.** 95 children with SMA types II, III (aged 1-4 years) were enrolled. The treatment concept in the main group (65 children) was developed taking into account the data of electroneuromyography (ENMG). 30 patients from the comparison group received traditional symptomatic therapy, excluding ENMG. At the initial symptoms of scoliosis, soft orthosis, stretch gymnastics and mesotherapy with neuropeptides were performed. Adaptive manual therapy was performed with the aggravation of scoliosis. Metabolic therapy (creatine, alfacalcidol) was prescribed for ENMG-verification of myopathy. In the early stages of contractures, massage and stretch gymnastics were performed. In severe forms movable stands, mobile tires, step-by-step plastering were used. During the ENMG verification of axonopathy, actovegin and thioctic acid were prescribed.

**Results.** In the main group motor deficits, ENMG disorders and the severity of scoliosis are less pronounced than in the comparison group.

**Conclusions.** The strategy of the personalized approach allowed us to form a model of precision therapy with the inclusion of an optimal range of therapeutic and preventive measures with the possibility of slowing the rate of disease progression.

